



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

**FACTORS INFLUENCING ADOPTION OF ARTIFICIAL INSEMINATION AND
KNOWLEDGE LEVELS ON ARTIFICIAL INSEMINATION AMONG
SMALLHOLDER DAIRY FARMER IN BALAWOLI SUB-COUNTY**

BY

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR
AWARD OF THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND
MANAGEMENT OF BUSITEMA UNIVERSITY.**

AUGUST, 2017

DECLARATION

I WAGABADHA CHARLES hereby declare that this dissertation is my original work and has never been submitted to any University or institute of higher learning for any academic award.

Signature 

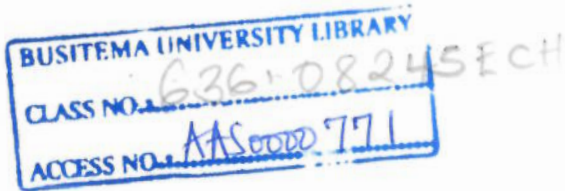
Date 31/10/2017

This work was done under the supervision of:

Dr. Matovu Henry

Signature.....

Date.....



DEDICATION

With love and appreciation, I dedicate this dissertation to my parents Mr. Dhikuşoka Lawrence and NamwaseTeopista, brothers and sisters for their wholesome love, guidance and above all their financial support. May you live with hope to see the fruits of your tireless efforts.

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LIST OF ABBREVIATIONS

AI	Artificial insemination
GDP	Gross Domestic Product
IMF	International Monetary Fund
MAAIF	Ministry of Agriculture, Animal Industry & Fisheries
MDG	Millennium Development Goal
MoLD	Ministry of Livestock Development
NAGRC & DB	National Animal Genetic Resource Center and Data Bank
NGOs	Non- Government Organization
PEAP	Poverty Eradication Action Plan
PMA	Plan for the Modernization of Agriculture
UBOS	Uganda Bureau of Statistics

ABSTRACT

In the study, factors influencing the adoption of Artificial insemination and farmers' knowledge levels on the cattle reproductive parameters were assessed. A total of 74 livestock farmers were purposively selected and the data was collected using a pre-tested structured questionnaire and analyzed using descriptive statistics and SPSS software version 16. The results revealed that men participate more in dairy farming with 81% as compared to 19 % women though women adopted A.I technology by 86% out of 14 women interviewed as compared to 83% out of 60 men interviewed. adoption level of A.I of farmers were 83. Farmers Knowledge level on A.I was influenced greatly by education level 38%, followed by Extension services, experience, service availability and dairy cooperatives with 20%, 17%, 15%, 10% respectively. Adoption of A.I was influenced by factors such as marital status, herd size, age of the household head, years spent in school by the household head and cattle breed kept by a farmer.

CHAPTER ONE: INTRODUCTION

1.1 Back ground

Globally, artificial insemination (A.I) in cattle has been commercially available since 1930s(Raymond.A.K and Saitullizam.A.K,2010). The introduction of germplasm through Artificial insemination (AI) is crucial to enhance the production potential of the local breeds (Mugisha, Kayiizi, Owiny, & Mburu., 2014).The development and use of Artificial Insemination technique has revolutionized cattle production and genetic improvement, particularly in the dairy sector in developed countries and almost more than 70 percent of animals are bred using AI in the developed world. The technology is almost practically not available in some countries of Africa (Kaayaeta., 2005).In countries of Northern Europe, Israel and Japan, dairy farmers use AI almost 80 to 90%. The use of A.I other than natural mating has various advantages such as faster genetical improvement. A report shows that AI is four times faster genetic progress compared to natural mating(Kinder, Osborne, Davis, & Day., 2005), thus reducing on the costs of feed and management of a bull, decreased spread of diseases resulting in healthy animals that produce more which is economically good for the farmers (Eklundh., 2013).

Despite the benefits of using AI, a large number of dairy farmers in other parts of the world, Uganda in particular still use natural service (NS) to breed all or part of their cattle herds (Valergakis, Arsenos, & Banos., 2017).Uganda has been using A.I breeding services for over 60 years but up to now only less than 10% of the population has adopted(Eklundh.,2013). As a consequence the total population of improved dairy cattle in the country is still low (MAAIF, 2009).The Government of Uganda, development practitioners, academicians, Non-governmental organizations (NGOs) and private sectors need to advocate the up grading of the genetic potential of indigenous breeds of cattle in the country through cross breeding with high yielding temperate breeds to improve on the productivity of the livestock sector through the use of artificial breeding services and selected breeding (Balikowa., 2011) hence the main objective of the study was to identify the factor that influences the adoption of A.I technology and the knowledge levels on cattle reproductive parameters among small holder dairy farmers in Balawoli sub-county, Kamuli district.

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